SHCHEOLOV, N.I.; SOKOL'SKIY, D.V.

Platinum promoted catalytic hydrogenation of liqued styrene on a nickel skeleton catalyst. Izv.AN Kazakh.SSR.Ser.khim. no.4:40-45

'51. (Styrene) (Hydrogenation)

(MLRA 9:5)

(MIRA 9:5)

BUKHMAN, A.V.; SOKOL'SKIY, D.V.

Rhodium promoted catalytic hydrogenation of cinnamic acid in presence of nickel on silica gel. Izv.AN Kazakh.SSR.Ser.khim. no.4:

(Cinnamic acid) (Hydrogenation)

THE CONTROL OF THE PROCESS OF THE PR

46-52 '51.

USSR/Chemistry - Catalysis	"Problem of the Role of the Carrier in Hetero-geneous Catalysis," D. V. Sokol'skiy, K. I. Stender (Deceased), Kazakh State U, Alma-Ata	"Zhur Fiz Khim" Vol XXV, No 3, pp 369-3(4) Examd hydrogenated dimethylacetylenyl carbinol over different amts of Pd deposited on active (from gas mask). Concluded from study of 2-stage reaction (hydrogenation of triple bond to double, then double to single): (1) Catalytic active centers consist of 2 Pd at, as assumed previously.	185115	USSR/Chemistry - Catalysis (Contd) Mar 51	(2) Catalyst and carrier form combined cryst lattice-in effect, new catalyst. (3) Anomalous behavior of surface with respect to deg of covering by catalysts necessitates reconsideration of Kobozev's theory of "active complexes."	• a *	185115
. ST	ISST						SCHOTISHIA D. A.

DAKOLASKIY, I.C. Tomadatini, W-2116 q, 25 du 5:	Detd: boundary of "kinetic" and "diffusion" in reaction; activation energy in each; chan boundary due to temp, ant of agitation, solverate of reaction (over-all and in both region due to amt of agitation and catalyst.	IC USSR/Chemistry - Acetylene Deri (Contd)	"Zhur Fiz Khim" Vol XXV, No 4, pp 495-503 Studies kinetics of reaction of dimethyla carbinol with H in 96% EtOH and in H2O ov ton Ni catalyst. Finds reaction to be of independent of temp, amt of substance, so	"Kinetics of the Hydrogenation of Dimethy." ylcarbinol on a SkeletonNickel Catalyst," Sokol'skiy, L. A. Buvalkina, Kazakh State S. M. Kirov, Alma-Ata	USSE/Chemistry - Acetylene Derivatives Hydrogenation
180733	c" and "diffusion" regions nergy in each; change of of agitation, solvent; l and in both regions)	180733 Derivatives Apr 51	4, pp 495-503 of dimethylacetylenyland in H20 over skele- tion to be of 0 order, substance, solvent.	of Dimethylac etylen- Catalyst," D. V. azakh State U imen i	tives Apr 51

		并通过19年夏季中华的战争。 电多形中枢 电记量 一					iTla	·- ÷	1
SOKOL'SKIY, D. V.	184 T12	of nitrobenzene (III) EMF of reduction of I and of nitrobenzene (III) than that of reduction of II is higher by 150-180 v than that of reduction of III is higher by 150-180 v than that of reduction of III in reduction passes over I as intermediate stage. As long as III is present, I is not reduced further. When III has been completely converted into I, I in alkali is reduced directly to aniline without passing over II. In absence of alkali, III is reduced directly to II without formation of I. Is reduced directly to II without formation of I. III on forming is reduced further to aniline.	USSR/Chemistry - Aniline (Contd) 1 Jun 51 nitrosobenzene (I) and phenylhydroxylamine (II) are nitrosobenzene st rates approaching max rate of reduction	184112	Examd reduction of nitrobenzene with H2 in liquid phase over skeleton Ni catalyst promoted or not promoted with Rh in O.l N soln of NaOH or neutral 50° alc. Measured potential of catalyst during reaction. Alkali poisons nonpromoted catalyst and increases rate of reduction in presence of Rh. In alkali on nonpromoted catalyst	"Dok Ak Nauk SSSR" Vol LXXVIII, No 4, pp 721-724	"Catalytic Reduction of Nitrobenzene," D. V. Sokol'skiy, V. P. Shmonina, Kazakh State U imeni S. M. Kirov	USSR/Chemistry - Aniline 1 Jun 51	
ing and the second second second				AND STREET		গোহ জন			

in 96 % alc. With Pt-BeSO_h, the rate of hydrogen-ation increases when triple bonds are no longer skiy, Kazakh State U imeni S. M. Kirov genation of triple bond and increases that of the double bond. Use of Pt-(Os-BaSO), does not change rate of hydrogenation of triple bond, but strongly firmed by hydrogenating dimethylacetylenylcarbinol(1) Pt activate hydrogen. This assumption was con-Os and Ru activate the double bond, while Pd and tained by depositing Pd or Pt on Os or Ru black. Highly active hydrogenation catalysts can be ob-"Active Carriers in Hydrogenation," D. V. Sokol'-USSR/Chemistry - Catalysts, "Dok Ak Nauk SSSR" Vol LXXIX, No 5, pp 823-826 USSR/Chemistry ~ Catalysts, Hydroof I is the same. bond. but reduces the time of hydrogenation of the double affect the rate of hydrogenation of the triple bond present. increases that of the double bond. Effect of concn SOKOL'SKIY, D. V. Raising concn of I reduces rate of hydro-With Pd-(Ru-BaSO4), Ru does not genation genation Hydro-(Contd) 11 Aug 51 11 Aug 51 2101126 210126

- 1. SOKOLISKIY, D. V.; BOLKHOVITIMA, Ye. G.; CHERMASOV, R. I.
- 2. USSR (600)
- 4. Cottonseed Oil
- Hydrogenation of cottonseed oil with a copper-chrome oxide catalyst and with a copper-nickel oxide catalyst on a chrome oxide carrier, Masl. zbir. prom., 17, No. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

Submishif, d.V., professor; GOLODOV, F.G.; Succession, L.V.

Hydrogenation of cottonseed oil with Ou-mi catalyst in a cerrying agent. Hash.-chir.orom. 17 no. 3:6-3 Ag '51. (MIRA 10:9)'

1. Kemakhskir komunarstventyy universitet ident S.F. Mirova. (Cottonseed oil) (Hydrogenation)

SOKOL'SKTY, D. energy of activation of the process is 9,000 ± crease in the intensity of stirring, starting from 224728 1,000 cal/mol. 300 oscillations per min of the vessel. The rehydrogenation of cinnamic acid proceeds in the "kinetic" region and does not depend on the innickel in a soln of 96% ethyl alc. Found that of hydrogenation of cinnamic acid over skeleton S. M. Kirov D. Sokol'skiy, L. Buvalkina, A. Bukhman, Chair of Catalysis and Tech Chem, Kazakh State U imeni "Zhur Obshch Khim" Vol XXII, No 4, pp 558-563 Investigated the effect of stirring on the kinetics "The Kinetics of Hydrogenation of Cinnamic Acid," USSR/Chemistry - Hydrogenation, Catalysts Apr 52

SONCLUMIY D. V.

USSR/Chemistry - Hydrogenation Catalysts

Nov 52

"Active Carriers in Hydrogenation," D. V. Sokol'skiy, Kazakh State U imeni S. M. Kirov

"Zhur Obshch Khim" Vol 22, No 11, pp 1934-1541

Os and Ru, which are apparently totally inactive as hydrogenation catalysts, activate double bonds. However, they lack the necessary activated H on their surface. Presence of Pd or Pt in the surface of Os or Ru on BaSO4 transforms these "active carriers" into highly efficient catalysts. This was fully confirmed by investigating the hydrogenation of dimethylacetylenylcarbinol. On the basis of

238125

238T25

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652130006-7"

potentiometric measurements pertaining to the

hydrogenation of this compd on Pt-BaSO_h, Pd-BaSO_h,

Pt-(Os-BaSOh), and Pd-(Ru-BaSOh), the relationship between the rates of hydrogenation of double and

triple bonds was investigated and explained by differentiating between the roles of adsorbed and dissolved H. Upon transition to hydrogena-

tion of the double bond on Pt, both the rate of

the reaction and the potential increase sharply, because the concn of H in the surface increases due to liberation of active centers which prior

to that adsorbed and activated triple bonds.

5"Zhur Prik Khim" Vol 25, No 8, pp 867-875 "The Catalytic Hydrogenation of Vinyl Ethers,"
D. V. Sokolsky, M. F. Shostakovsky, B. I. Mikhantev,
Fr. G. Golodov, Inst of Org Chem, Acad Sci USSR and ÄKazakh SShU USSR/Chemistry - Vinyl Ethers, Catalysts can be hydrogenated quantitatively by using a low Vinyl ethyl, vinyl isopropyl and vinyl butyl ethers and Pd/CaCO3 catalysts. Hydrogenation at temps temp and aq solns, and in the presence of nickel close to zero requires little time. With the 2d SOKOLSKY, D. V. ened from 3 hrs to 20-30 min. For H-volumetric analysis of vinyl butyl ether, the best catalyst is N1, and for vinyl isopropyl ether the best catalyst batch of vinyl ether, the activity of the catalyst increases, and the rate of hydrogenation is shortis Pd/CaCO3. glass used. action and a special jacketed vessel made of Mo catalyst was measured during the course of the rehydrogenation of vinyl ethyl ether. The emf at the Both catalysts are suitable for the Aug 229T11 228T11 75

	UKIY, P.
213T31	
double g the po- e and Llues of	of emf, so that transition from triple to double bond can be easily established by measuring the tential. Hydrogenation of sodium maleinate and sodium fumarate takes place at different values emf.
that that reac- ption the the the 213731	Proposes a new, potentiometric method of investigating powdered hydrogenation catalysts. Finds that this method enables detn of hydrogen concn on the surface of the catalyst in the course of the reaction and also indirectly of the deg of adsorption of the unsatd hydrocarbon. Hydrogenation of the triple and double bond proceeds at different values triple and double bond proceeds at different values
of Hy- Nickel Mickel	"Potentiometric Investigation of the Reaction of drogenation in the Liquid Phase on a Skeleton Ni Catelyst," D. V. Sokol'skiy, V. A. Druz', Kazakh State U, Alma-Ata "Zhur Fiz Khim" Vol XXVI, No 3, pp 364-370
Mar 52	USSR/Chemistry - Catalysts

H begins to play a role in the reaction.

Addn of

energy of H binding somewhat; furthermore, dissolved

Addn of Pd to skeleton Ni increases the

Pt to skeleton Wi brings about a sharp increase of

the energy of H binding and a noticeable reduction

Depending on the limiting

stage of the process, introduction of benzyl

of the reaction rate.

mercaptan either brings about poisoning or

activation of the hydrogen or hydrocarbon.

catalyst is greatest on Pt black, smallest on Pd

which hydrogen is bound to the surface of the

black, and about the same on skeleton Ni as on Pd

black.

USSR/Chemistry - Catalysts

Apr 52

Sokol'skiy, Kazakh State U imeni S. M, Kirov, a Skeleton Nickel Catalyst," V. A. Druz', D. V. Reactions. Effect of Additives on the Activity of Alma-Ata "Potentiometric Investigation of Hydrogenation

"Zhur Fiz Khim" Vol XXVI, No 4, pp 484-491

gated the effects of added Pt, Pd, and benzyl With the aid of the potentiometric method, investimaleate, and sodium fumarate. hydrogenation of dimethylacetylene carbinol, sodium mercaptan on catalyst activity and emf in the The energy with

SOKOLISKIY, D. V.

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652130006-7"

SOKOL'SKIY, D.V.,: NIKOLENKO L.N.

Diazonium Salts; Cupro s Acetylide

Interaction of Diazonium salts with cuprous acetylide. Dokl. AMSSSR 82 No. 6:923-925 F '52 Kazakhskiy Gosudarstvennyy Universitet im. S.M. Kirova rc. 21 Dec. 1951

SO: Monthly List of Russian Accessions, Library of Congress,

July 52

1/5/3/, Uncl.

SOKOL'SKIY, D. V.

USSR/Chemistry - Catalysts, Acetylene 21 Apr 52
Derivatives

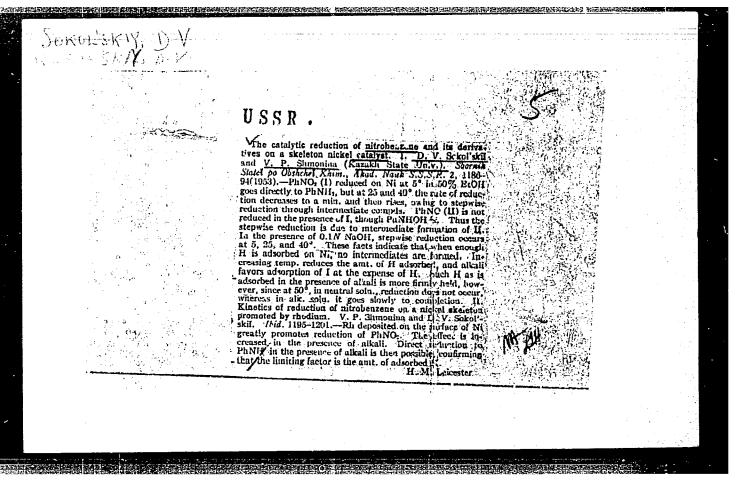
"Catalytic Hydrogenation Under Constant Pressure," D. V. Sokol'skiy, O. S. Popov

"Dok Ak Nauk SSSR vol LXXXIII, No 6, pp 873-875

The effect of const hydrogen pressures from 1 to 3 atm was investigated potentiometrically in the hydrogenation of methylethyl acetylenyl carbinol on skeleton nickel. The results are shown graphically and in tables.

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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652130006-7"



SOKOL'SKIY, D. V. and SHEONIA, V. P.

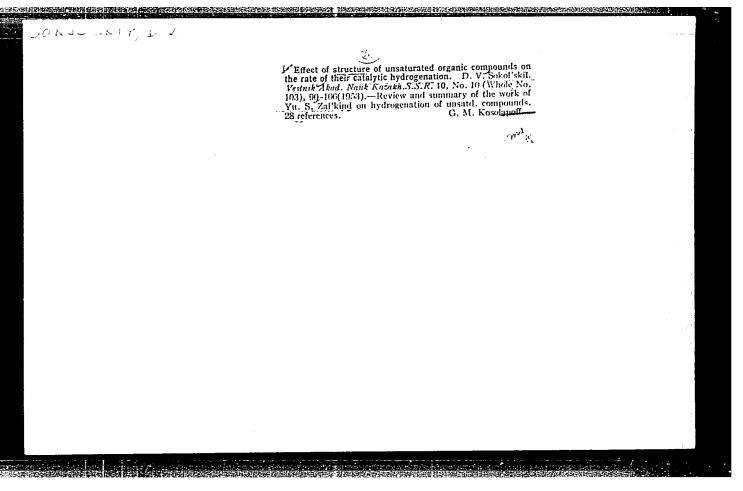
Catalytic Reduction of Mitrobenzene and Some of its Derivatives on "Skeleton" Nickel Catalyst. II. Kinetics of Mitrobenzene Reduction on "Skeleton" Mickel with Rhodium Promoter, page 1195, Sbornik Statey po obshchey khimii (Collection of Papers on General Chemistry), Vol II, Moscow-Leningrad, 1953, pages 1680-1686.

Kazakh State II

SHCHEGLOV, N.I.; SOKOL'SKIY, D.V.

Hydrogenation of 2-methyl-4methoxy-2,3-butene. Izv.AN Kazakh.
SSR Ser.khim. no.5:39-44 '53. (MLRA 9:5)

(Hydrogenation) (Butene)



SOKOL'SKIY, D.V.

USSR/Scientists - Chemistry

Card

• 1/1 Pub. 123 - 3/19

Authors

Kedrov, B. M., Dr. of Philosophy

Title

About the previously unknown predictions of D. I. Mendeleyev

Periodical

Vest. AN Kaz. SSR 12, 14 - 23, December 1953

Abstract

Selected excerpts from D. I. Mendeleyev's manuscripts in which he predicted the existence of eighteen new elements (unknown at that time) and the variability of elements. The names of the elements and their atomic

numbers, are listed.

Institution :

Acad. of Sc. Kaz. SSR

Submitted

: D. V. Sokol'skiy, Act. memb. of Acad. of Sc. Kaz. SSR

SOKOL'SKIY, D.Y.

USSR/Miscellaneous - Materials

Card

: 1/1 Pub. 123 - 14/19

Authors

: Konstantinov, V. V., Cand. of techn. sc.

Title

The role of hydration, crystallization and desiccation processes during solidification of structural gypsum

Periodical

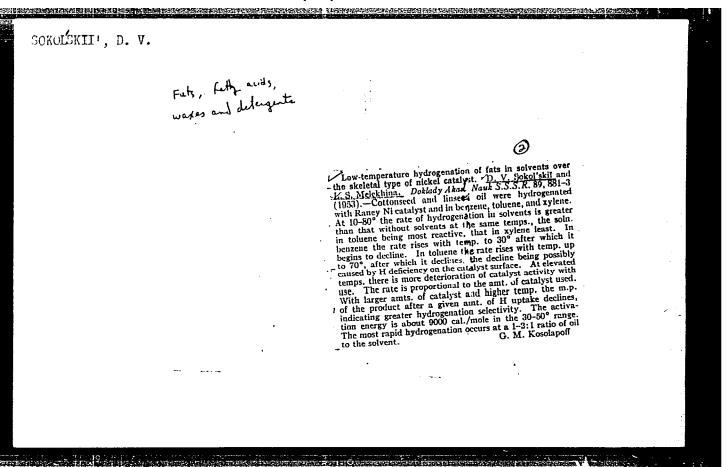
Vest. AN Kaz. SSR 12, 90 - 95, December 1953

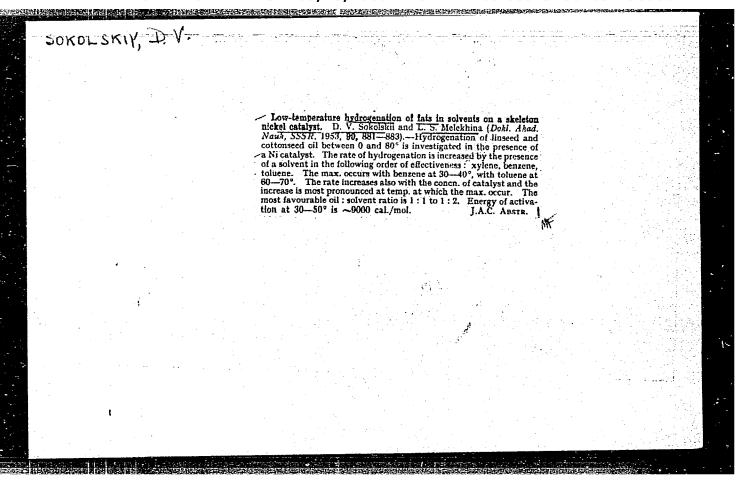
Abstract

The positive and negative effects of hydration, crystallization and desiccation on the hardening and mechanical strength of structural gypsum, are described. Five USSR references (1943-1951). Tables, graph, drawing.

Institution : ...

Presented by: D. V. Sokol'skiy, act. memb. of Acad. of Sc. Kaz. SSR





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SOKOL'SKIY, D.V., deystvitel'nyy chlen; YERZHANOV, A.I.

Hydrogenation of conjugate double bonds of benzalacetone. Dokl.AN SSSR 93 no. 3:503-505 N '53.

1. Akademiya nauk Kazakhskoy SSR (for Sokol'skiy).

(Hydrogenation) (Acetone)
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"APPROVED FOR RELEASE: 08/25/2000

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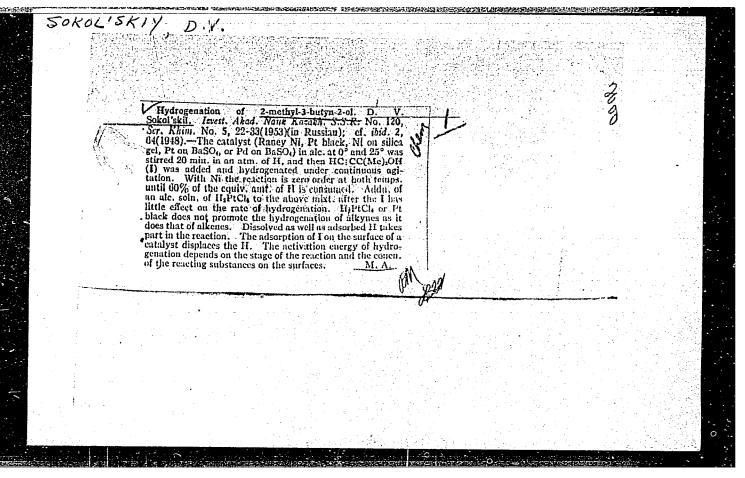
Suitchillians ...

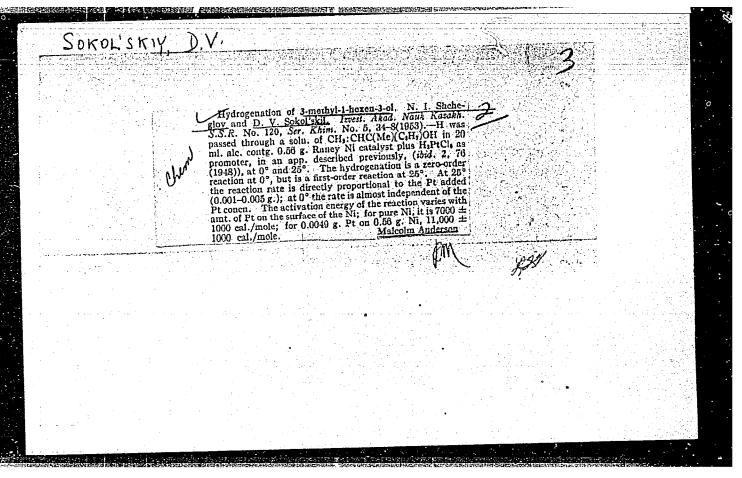
Chemical Abst. Vol. 48 No. 9 May 10, 1954 General and Physical Chemistry @ Chew

Hydrogenation at constant pressure over platinum, palladium, and iridium. D. V. Sokol'akli and O. S. Popov. Poklady Akad. Nauk S.S.S.R. 33, 831 4(1953).—
Hydrogenation of McEtC(OH)C;CH over Pt black at 0° gives an S-shaped rate curve; increase of H₁ pressure from 2 atm. to 3 atm. raises the rate 1.5-fold. Rise in temp. to 40° necelerates the reaction. At 2 atm. the 1st part of the reaction follows a zero-order rate, but in later stages at 2 atm. there is seen a break in the curve that is not seen at higher pressures. The catalyst potential rises by 5-10 mv. when the pressure is raised from 2 to 3 atm. With large amts. of the catalyst it becomes evident that the double bond is hydrogenated at a higher rate. Hydrogenation of Me₂C(OH)C;CH over Pd-CaCO₁ shows more rapid addu. of H₂ to the triple bond than to the double bond, a definite break in the curve being observed; the catalyst potential at 1st drops by 200 mv., then rises; it reaches the satn, value at the end of the reaction. Rises in temp. and pressure accelerate the rate of hydrogenation markedly. Similar hydrogenation over Ir-C shows a 1st-order reaction course; increased pressure accelerates the reaction but slightly; the catalyst potential remains high and relatively const.

G. M. Kosolapoff G. M. Kosolapoff

CKIY, D. V. With increased filling of the surface of C with Pt, 4-5% of Pt by wt. In the hydrogenation of cinnamic "Catalytic Hydrogenation in the Presence of Platidirectly proportional to the quantity of Pt within acid, the reaction product inhibits the catalyst.-The activity of the catalyst is not affected mate-USSK/Chemistry - Catalysts, Hydrogenation Sep 53 268T8 26**9**r8 a wide range. The most active catalyst contains num Deposited on Activated Carbon," D.V. Sokol' vinyl phenyl ether, the rate of the reaction is the activity of the catalyst increases up to a certain limit, then remains const, and finally drops. In the hydrogenation of cyclohexene or Iz Ak Nauk KazSSR, No 118, Ser Khim, Issue 6, pp 107-118 rially by the method of deposition of Pt. skiy, T. Bakardzhiyeva





JOKULISKIY, D. V.

Chemical Abstracts May 25, 1954 Dyes and Textile Chemistry Hydrogenation of linseed oil on nickel catalyst on silicate gel promoted by platinum and palladium. A. V. Bukhman and D. V. Sokol'skil. Izvest. Akad. Nauk Kazakh. S.S.R. No. 123, Ser. Khim. No. 7, 9-19 (1953); cf. following abstr.—Successful and rapid hydrogenation of linseed oil is possible in EtOH with Ni catalyst. promoted with Pt and Pd. The apparent activation energy for such catalysts is about 6000 cal./mole, that for unpromoted catalysts is about 6000 cal./mole, that for unpromoted catalyst 12,000 cal./mole. The promoting effect of Pd exceeds that of Pt, but its effect disappears completely at temp. of 120° or higher. With Pt promoter successful hydrogenations are readily run at 40°. Solvents like EtOH, toluene, or glycerol can be used to reduce the viscosity of the original oil. G. M. Kosolanoff.

(3)

CIA-RDP86-00513R001652130006-7" APPROVED FOR RELEASE: 08/25/2000

SOKOLISKIY, D. V.

Chemical Abstracts May 25, 1954 Oyes and Textile Chemistry Hydrogenation of cottonseed oil in the presence of Raney nicke: catalyst promoted by platinum and palladium. N. I. Sh. heglov and D. V. Sokol'skij. Isvest Akad. Nauk Kazakh. S.S.R. No. 123, Ser. Khim. No. 7, 30-8(1953); cf. preceding abstr.—With unpromoted Raney-type Ni catalyst the cottonseed oil is hydrogenated best at 60-80° Higher temp. lowers the apparent activation energy: at 25-40° it is 10,000-11,000 cal./mole; at 80-100° it is 2000-3000 cal./mole. On promotion with Pt the reaction rate rises with the amount of promoter up to 0.009 g. per 0.50 g. Ni; such promotion raises the temp. optimum to 80-100°. Ni promoted with Pd is somewhat more active than that with Pt, and promotion with Pd lowers the optimum temp. to 40-60°. Addn. of Pt increases the strength of bonding of H to the catalyst surface, while Pd has an opposite effect.

G. M. Kosolapoff.

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652130006-7

KUNAYEV, D.A.: SOKOL'SKIY, D.V.

Resolution of the Presidium of the Academy of Sciences of the Kazakh S.S.R. concerning the 200th anniversary of the reunification of the Ukraine with Russia. Vest. AN Kazakh. SSSR 11 no.1:22-24 Ja 154.

(MIRA 7:2)

1. Prezident Akademii nauk Kazakhskoy SSR (for Kunayev).

2. Glavnyy uchenyy sekretar' Prezidiuma Akademii nauk Kazakhskoy SSR, deystvitel'nyy chlen Akademii nauk Kazakhskoy SSR (for Sokol'skiy).

(Academy of Sciences of the Kazakh S.S.R.)

SOKOL'SKIY, D. V.

USSR/Chemistry - Hydrogenation

Card 1/1

Pub. 123 - 11/17

CONTROL TO CONTROL TO STANDAR SECURIOR SPANISHED STANDARD SECURIOR SECURIOR

Authors

: Sokol'skiy, D. V.; and Levchenko, L.

Title

! Hydrogenation of unsaturated compounds

Periodical

1 Vest. AN Kaz. SSR 11/1, 92-105, Jan 1954

Abstract

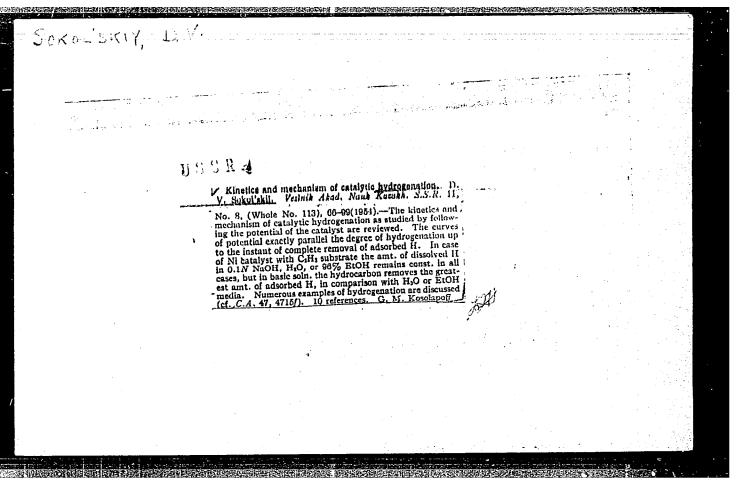
Pescription is given of experimentation with the hydrogenation of a mixture of dimethylacetylenylcarbinol and propiolic acid in the presence of nickel and palladium as catalysts on CaCO₃, after previous hydrogenation of the separate components of the mixture. Detailed data are presented that were compiled from the experiments. Graphs; Tables.

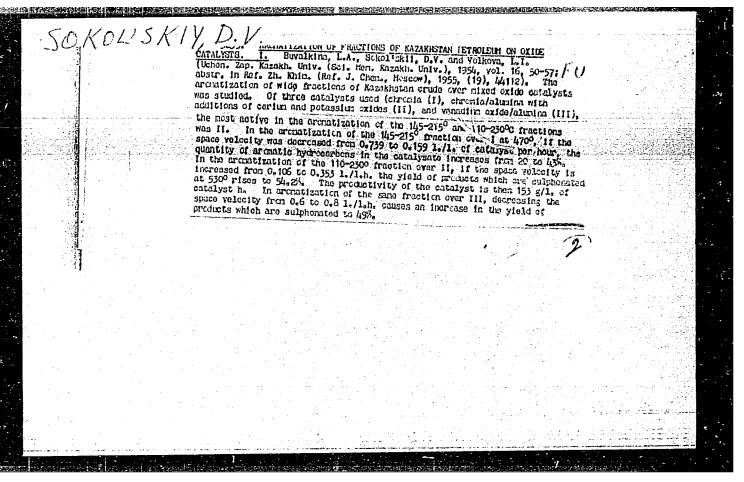
Institution :

. . .

Submitted

. . .





SOKCL'SKIY, D. V. USSR/Chemistry

Card 1/1

Authors : Buvalkina, L. A.; and Sokol'skiy, D. V.

Title : Kinetics of hydrogenation of benzyl cinnamate over a skeleton

nickel catalyst

Periodical : Zhur. Ob. Khim. 24, Ed. 5, 833 - 839, May 1954

Abstract : The hydrogenation of benzyl cinnamate at room temperature over a

skeleton nickel catalyst results in the discontinuation of the O-C bond and the reaction products in this case are toluene and hydrocinnamic acid. The rate of hydrogenation of the benzyl ether, up to the point of absorption of 56% of the hydrogen, is relatively high and followed by the hydrogenation of the - CH - CH - bond; hydrogenolysis occurs at lower rates. The apparent hydrogenelysis energy at temperatures of 25 - 40° is 13950 cal/mol. At high temperatures (from 25 - 50°) the thermal coefficient of hydrogenation is small and the apparent activation energy drops to zero. Five USSR references. Tables,

Graphs.

Institution: The S. M. Kirov State University, Alma-Ata, Kaz-SSR

Submitted: November 28, 1953

BAYKONUROV, O.A.; BELYAYEV, A.I.; BOGOMOLOV, V.I.; VANYUKOV, V.A.; GAZARYAN, L.M.;

GLEK, T.P.; GORYAYEV, M.I.; KARCHEVSKIY, V.A.; KLUSHIN, D.N., KUNAYEV,
D.A.; LEBEDEV, B.N.; LISOVSKIY, D.I.; LOSKUTOV, F.M.; MITROFANOV, S.I.;

MOLCHAMOV, A.A.; MOSKYITIN, I.N.; OL'KHOV, N.P.; OSIPOVA, T.B.;

PLAKSIN, I.N.; POMOMAREV, V.D.; RUMYANTSEV, M.V.; SOKOL'SKIY, D.V.;

SOKOLOV, M.A.; SPASSKIY, A.G.; STRIGIN, I.A.; SUSHKOV, K.V.;

SHAKHNAZAROV, A.K.; YASYUKEVICH, S.M.

Khosrov Kurginovich Avetisian, obituary. TSvet.met.27 no.3:66-68

My-Je '54.

(Avetisian, Khosrov Kurginovich, 1900-1954)

SOKOL'SKIY, D.

Hydrogenation USSR/ Chemistry

Card

: 1/1

Authors

: Buvalkina, L. A., and Sokol'skiy, D. V.

Title

: Kinetics of hydrogenation of cinnamic alcohol over skeleton nickel

Periodical

: Zhur. fiz. khim. 28, Ed. 6, 961 - 969, June 1954

Abstract

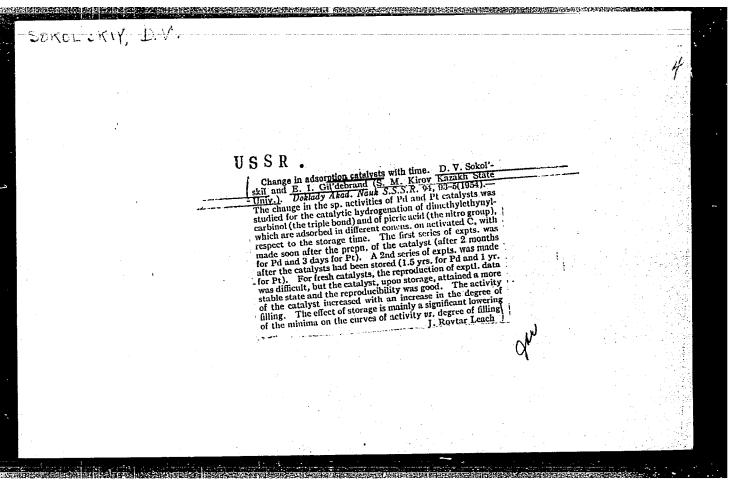
! The kiretics of hydrogenation of cinnamic alcohol over a skeleton Nicatalyst was investigated at temperatures of 0.25 and 40°C, and the zero-order of reaction was established at the point where the theoretically required amount of H is completely absorbed. Other factors affecting the rate of hydrogenation, are listed. Progressive addition of Pt to the Ni catalyst changes the reaction order from zero to one. The order of hydrogenation reaction during sufficiently large Pt concentrations, is explained. Ten references: 8 USSR, 1 USA and 1 French. Tables; graphs.

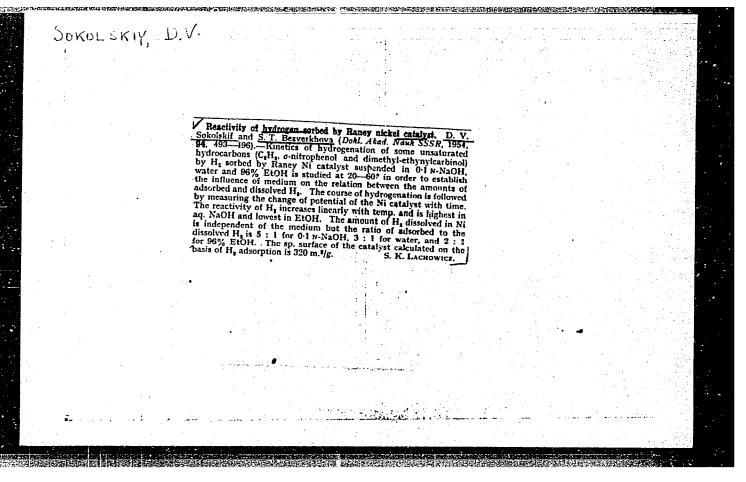
Institution : The S. M. Kirov Kazakh State University, Alma-Ata

Submitted

: April 16, 1951

CIA-RDP86-00513R001652130006-7" APPROVED FOR RELEASE: 08/25/2000

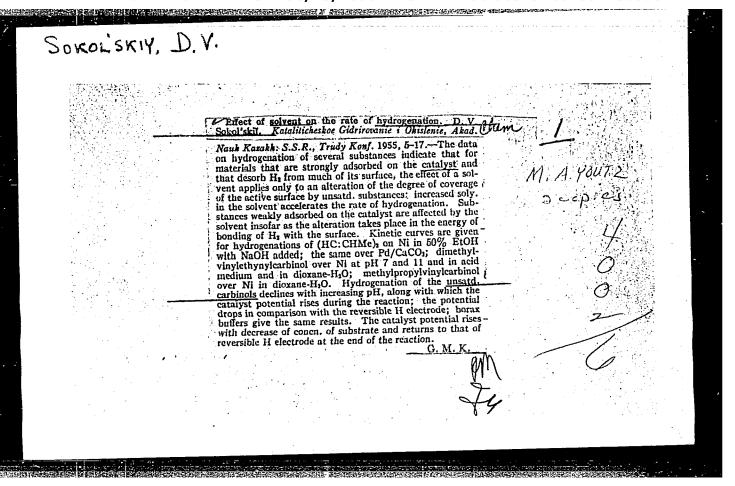




SOKOL'SKIY, D.V., redakter; GLAZYRINA, D.M., redakter; ROROKINA, Z.P., tekhnicheskiy redakter.

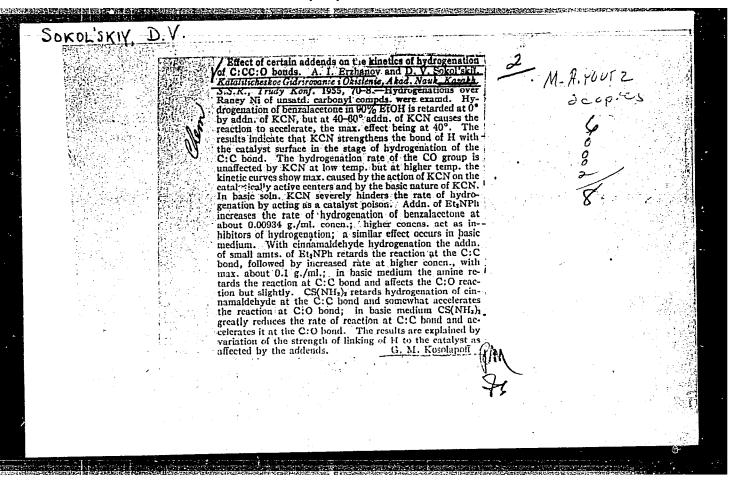
[Catalytical hydrogenation and exidation] Kataliticheskoe gidrirevanie i ekislenie. Alma-Ata, Izd-ve Akademii nauk Kazakhekei SSR, 1955. 295 p. (MIRA 9:4)

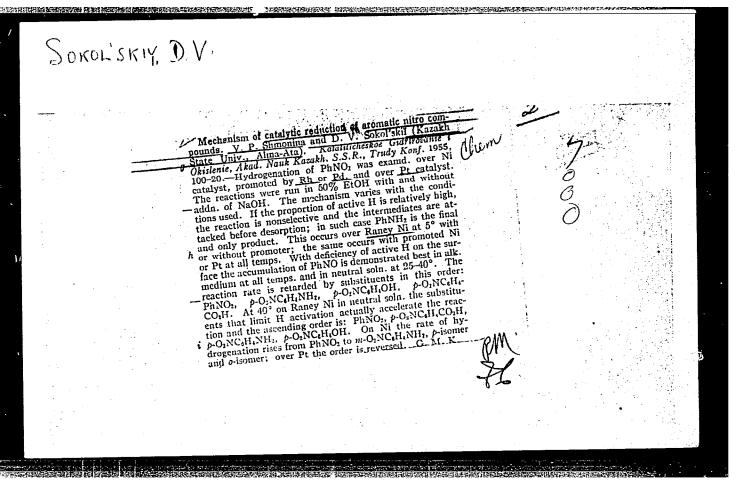
1.Deystvitel'myy chlen AN Kazakhskey SSR (for Sekel'skiy). 2.Konferentsiya pe kataliticheskemu gidrirovaniyu i okisleniyu. (Hydrogenation) (Oxidation)

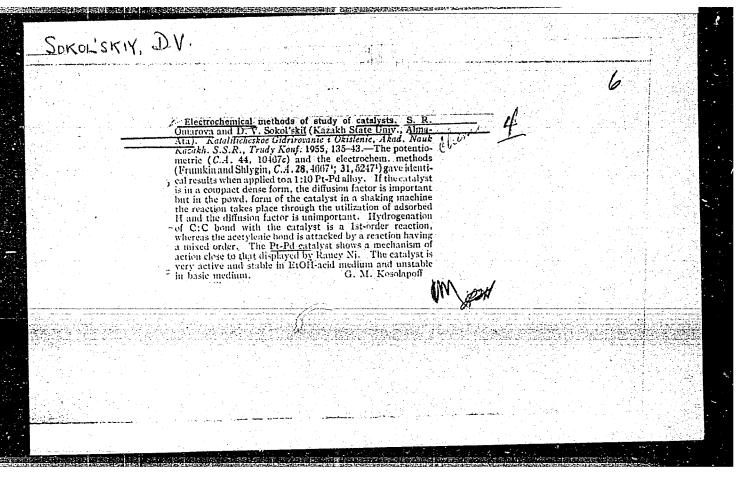


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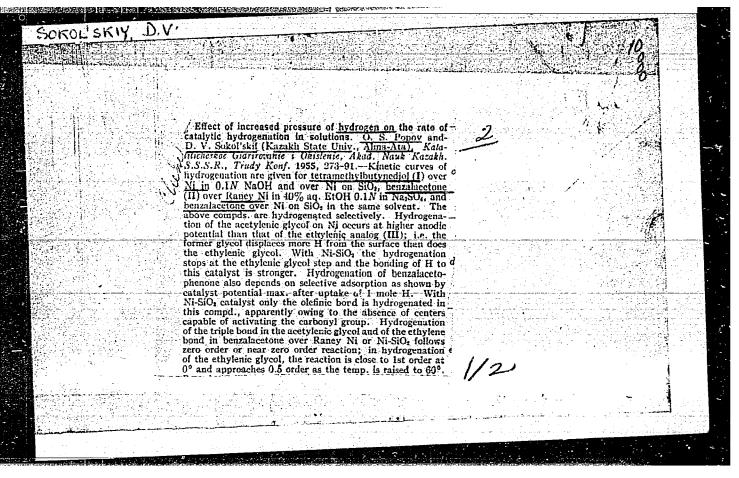
CIA-RDP86-00513R001652130006-7

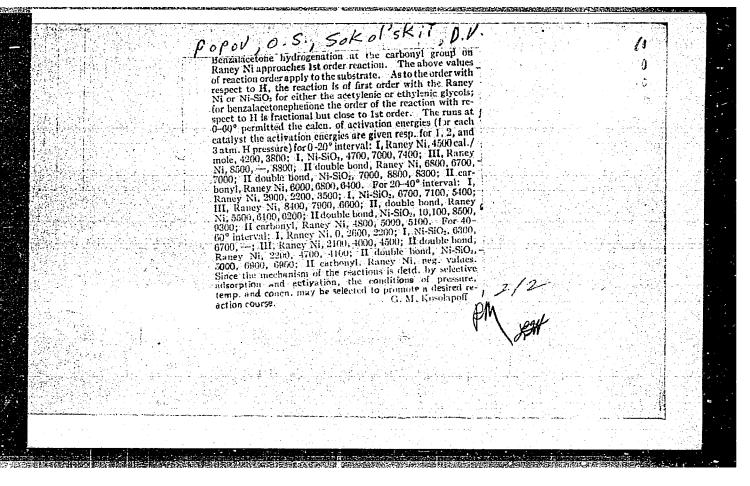


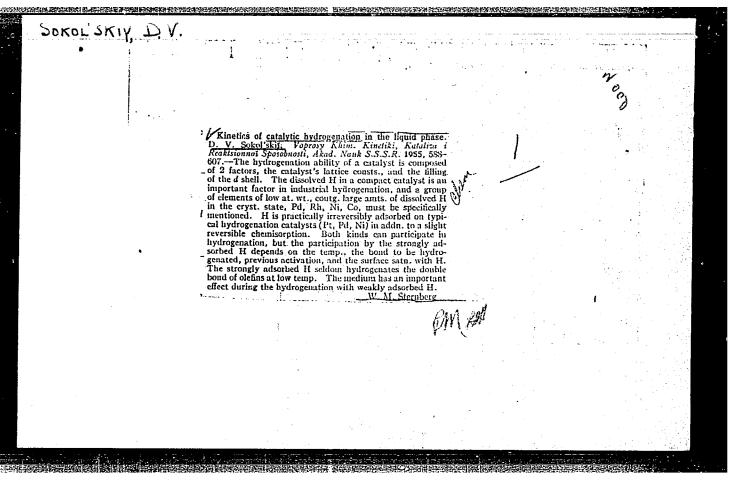




SOKOLSKIY, J	D.V.
	Low-temperature hydrogenation of cottonseed oil on Inickel-chrome catalyst. D. V. Sokol'skii and E. G. Bolkhovitina (Kazakh State Univ., Alma-Ata). Kataliticheskoe Gidrirozanie i Okislenie, Akad. Nauk Kazakh. S.S.R., Trudy Konf. 1955, 193-203.—Ni-Cr citalysts with to without a support can be used for hydrogenation of the cottonseed oil at 120-509.
	cottonseed oil at 120-60°; this is 70-100° below the usual practice for Ni-Cu catalyst used in the U.S.S.R. This catalyst without carrier support can be used 10-15 times. The rate of reaction improves with stirring. The catalyst can be stored up to 1.5 months. For regeneration a temp. of 350° is necessary. G. M. Kosolapoff
	L







SOKOL'SKIY, D.V.

USSR/ Chemistry - Catalytic hydrogenation

Card 1/1

Pub. 123 - 8/11

Authors

Sokol'skiy, D. V., and Erzhanova, M. S.

Title

The nature of the solvent and its effect on the rate of hydrogenation

Periodical : Vest. AN Kaz. SSR 2, 75 - 79, Feb 1955

Abstract

An investigation was conducted to determine the effect of the pH of a medium on the rate of hydrogenation of cyclohexene, hexine and hexene over Pt-Fd catalysts in a 96%-ethyl alcohol solution. The results obtained are presented in graphs. Ten references: 9 USSR and 1 Italian (1908 - 1954). Graphs.

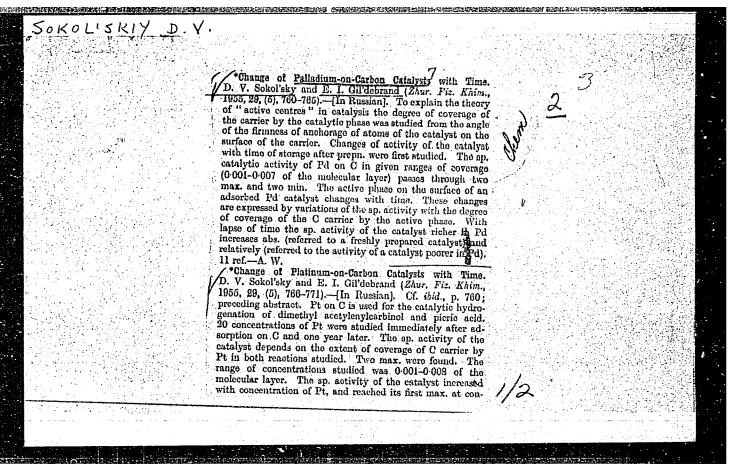
Institution:

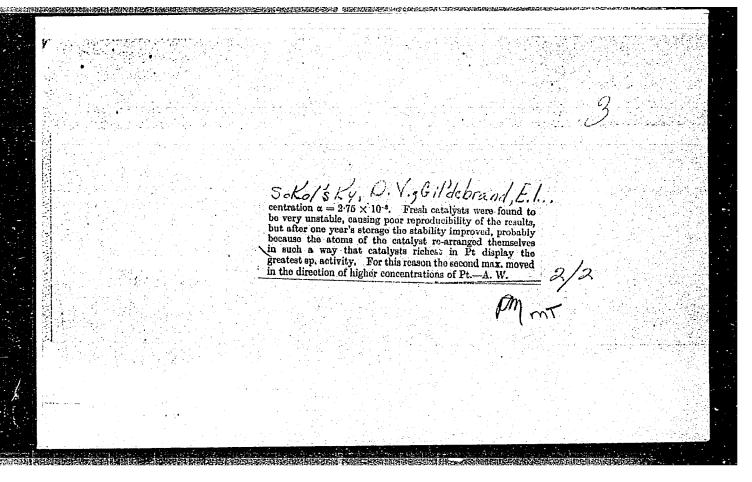
Submitted:

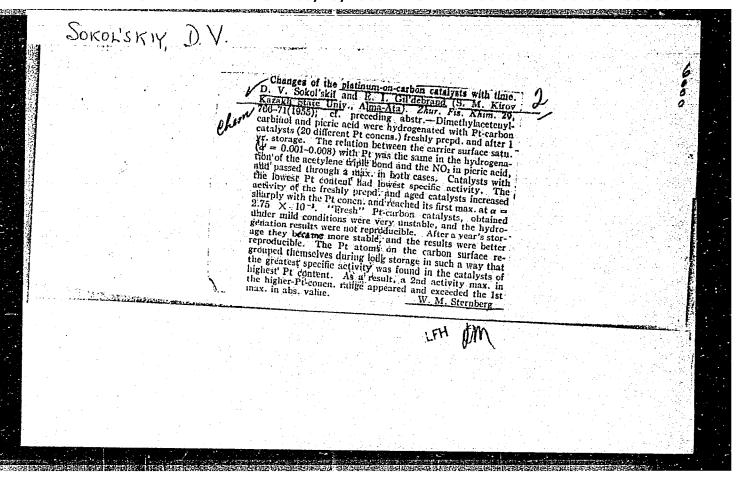
SOKOL'SKIY, D.V.; FASMAN, A.B.

Effect of the amount of skeleton nickel catalyst on the speed of hydrogenation of certain unsaturated alcohols. Vest.AN Kazakh

SSR 11 no.9:70-77 S '55.
(Hydrogenation) (Catalysts, Nickel) (Alcohols)







CIA-RDP86-00513R001652130006-7 "APPROVED FOR RELEASE: 08/25/2000

S- KNISKIY DV

USSR Chemistry - Organic chemistry

Card 1/1

Pub. 22 - 23/49

Authors

Krupennikova, K. A., and Sokol'skiy, D. V., Memb. Corr. Acad. of Sc.,

Kaz. SSR

Title

Catalytic cyclization of ortho-nitroethyl benzene

Periodical :

Dok. AN SSSR 102/1, 93-95, May 1, 1955

Abstract

Experiments were conducted to determine the catalytic derivation of indole from direct cyclization of o-nitroenthyl benzene which reduces one stage of the synthesis process. The results obtained during the reaction over an aluminum silicate catalyst (of petroleum cracking application) saturated with chromium anhydride and activated with KOH are listed. Maximum indole yield was obtained at a molecular ratio of o-nitroethyl benzne: hydrogen of 1:1. Seven references: 4 USSR and 3 USA (1936-1951). Tables.

Institution :

The Kazakh State University im. S. M. Kirov

Submitted

November 14, 1954

CIA-RDP86-00513R001652130006-7 "APPROVED FOR RELEASE: 08/25/2000

SOROLSKIF, WK

USSR/Chemistry - Physical chemistry

Card 1/2

Pub. 22 - 33/54

Authors

Sokol'skiy, D. V., Act. Memb., Acad. of Sc., Kaz. SSR; and Omarova, S. R.

Title

Electrochemical and catalytic properties of a Pt-Pd alloy (1:10)

Periodical : Dok. AN SSSR 102/5, 977-979, Jun 11, 1955

Abstract

1 Experiments were conducted at various temperatures and different alkaliacid concentrations to determine the electrochemical and catalytic properties of Pt-Pd alloys. The alloy was obtained through combined electrochemical deposition in a PdCl2 PtCl mixture. It was found that the hydrogenation of the double as well as triple bond in the Pt-Pd alloy takes place at a considerably high rate. The stablished greater catalytic activity

of the alloy tested is explained by the increase in the number of

Institution : The S. M. Kirov State University, Kazakhstan

Submitted

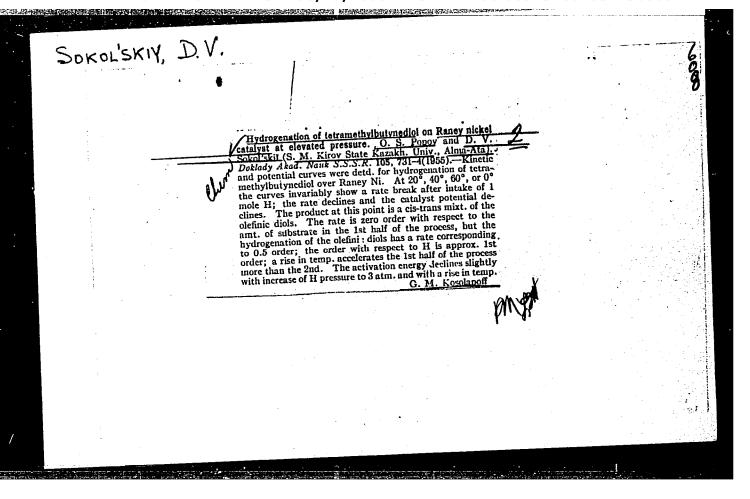
: January 18, 1955

CIA-RDP86-00513R001652130006-7 "APPROVED FOR RELEASE: 08/25/2000

Card 2/2 Pub. 22 - 33/54

Periodical : Dok. AN SSSR 102/5, 977-979, Jun 11, 1955

: activated-adsorbed hydrogen on the surface of the alloy. The property of such catalyst was found to be similar to the properties of a skeletal Ni. Four USSR references: (1934-1952). Table; graphs. Abstract



USSR/Fhysical Chemistry - Electrochemistry B-12

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 3955

: Skopin Yu.A., Sokol'skiy D.V. : Academy of Sciences Kazalth SSR : Electrochemical Measurement of the Surface of Metal Powder Author Inst

Title

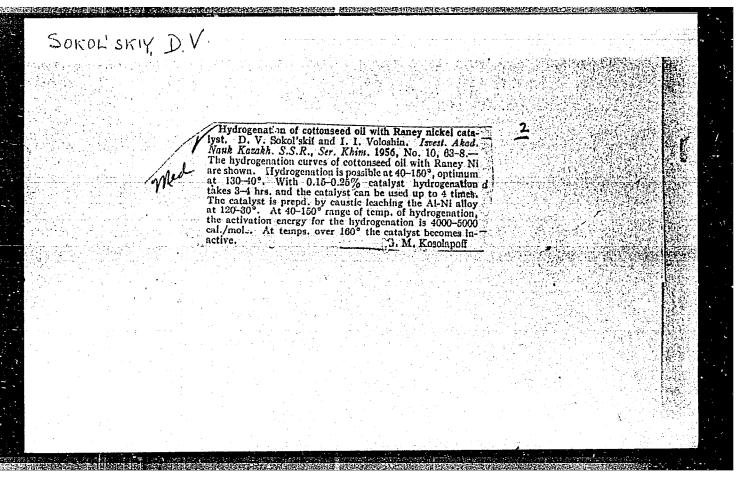
Orig Pub : Vestn. AN KazSSR, 1956, No 6, 89-91

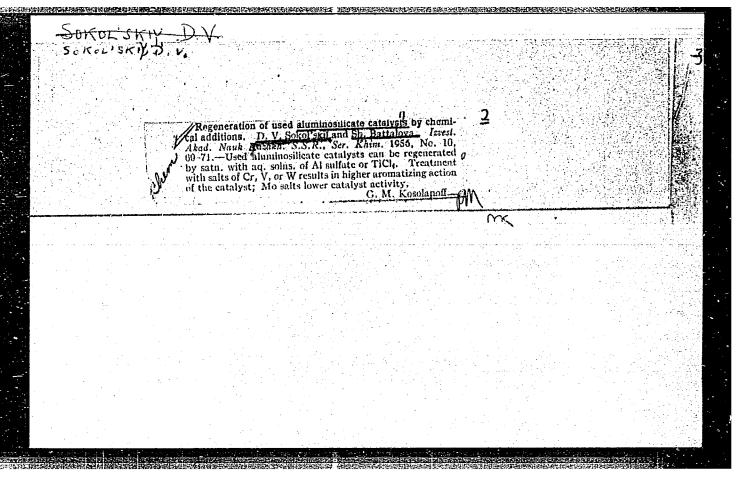
Abstract : Charging curves (CC) were recorded for Pt- and Pd-black

in 0.1 N H2SO4. It is shown that the CC thus obtained are fully similar to the charging curves obtained for smooth Pt and Pd electrodes. Actual surfaces of Ptand Pd-black, calculated on the basis of the cathodic

. branch of CC, are of 260 and 280 m²/g, respectively.

Card 1/1- 200 -



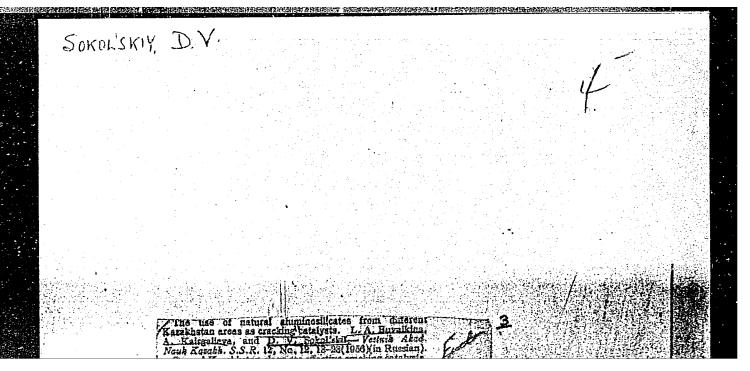


SKOPIN, Yu.A.; SOKOL'SKIY, D.V.

Electrochemical measurement of the surface of powdered metals.

Vest.AN Kazakh.SSR 12 no.6:89-91 Je '56. (MLRA 9:8)

(Powder metallurgy) (Electrochemical analysis)



CIA-RDP86-00513R001652130006-7"

USSA/Kinetics - Combustion. Explosions. Topochemistry. Catalysis.

: Referat Thur - Khimiya, No 6, 1957, 18638 Abs Jour

: V.P. Shronina, D.V. Sokol'skiy. Author

: Catalytic Reduction of Aromatic Nitrocompounds. VI. Title

Influence of Some Functional Groups on Kinetics of

Nitrogroup Reduction on Skeleton Nickel.

: Zh. obshen. khimii, 1956, 26, No 6, 1759-1765 Orig Pub

: The reduction of nitrobenzene (I), nitrobenzoic acid Abstract

(II), n-mitrophenol (III) and n-mitroamiline (IV) in aqueous-alcohol and alcohol-alkaline solutions on a skeleton Ni catalyst was studied at 5, 25 and 400. The reduction speed in aqueous-alcohol solutions at 250 was II < I < III < IV, at 5° I was reduced more rapidly, and at 40° more slowly than the other compounds. Introduction of alkalis in the solution decreased the re-

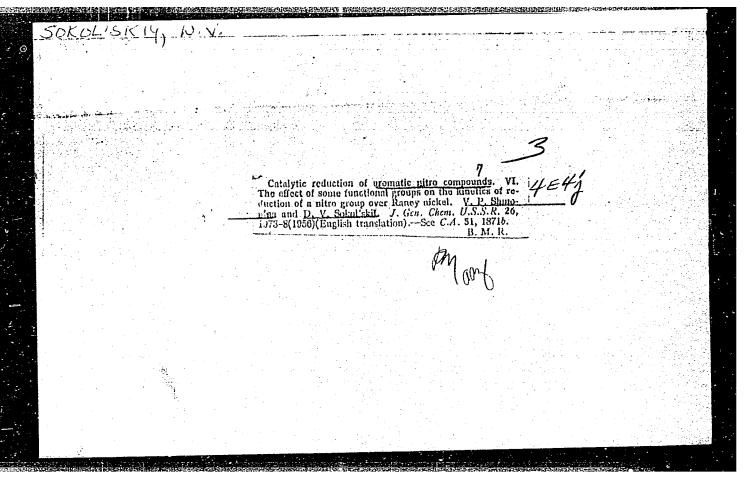
action speed. Promotion of the catalyst with rhodium in-

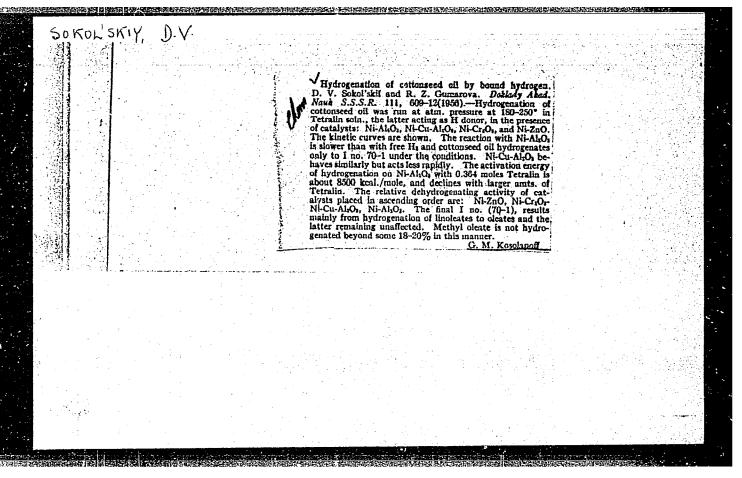
creased the reduction speed of I. On a promoted catalyst,

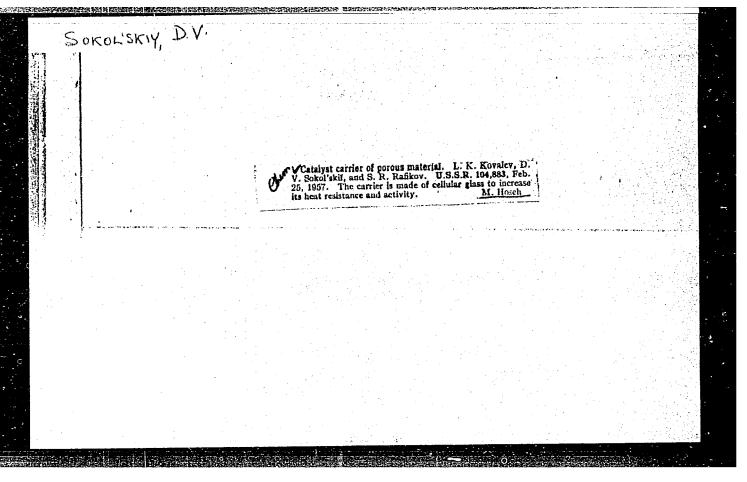
- 282 -Card 1/2

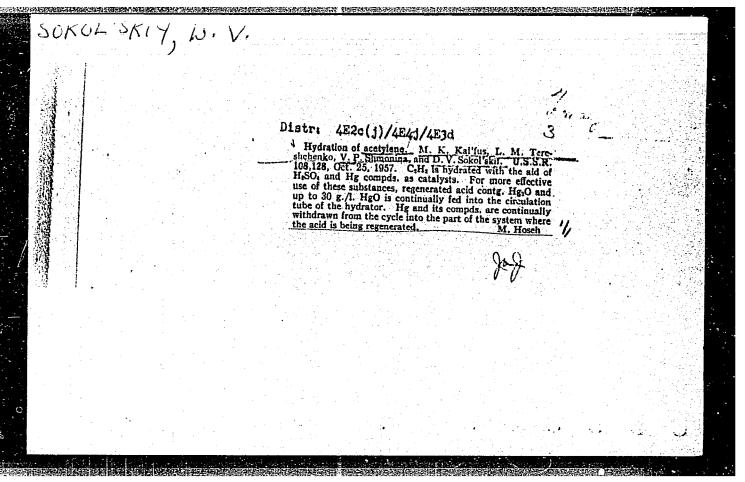
APPROVED FOR RELEASE: 08/25/2000

- 283 -Card 2/2









L.V. SOKOLSKIY

USSR/Physical Chemistry - Kinetics, Combustion, Explosions,

B-9

Topochemistry, Catalysis.

Abs Jour : Referat Zhur - Khimiya, No 1, 1958, 510

Author : A.M. Sokol'skaya D.V. Sokol'skiy.

Inst : Academy of Sciences of Kazakh SSR.

Title : Catalytic Hydrogenation of Some Substituted Ethylenes.

Orig Pub : Izv. AN KazSSR. Ser. khim., 1957, vyp. 1, 51-57

Abstract : The hydrogenation speed of monosubstituted ethylenes in

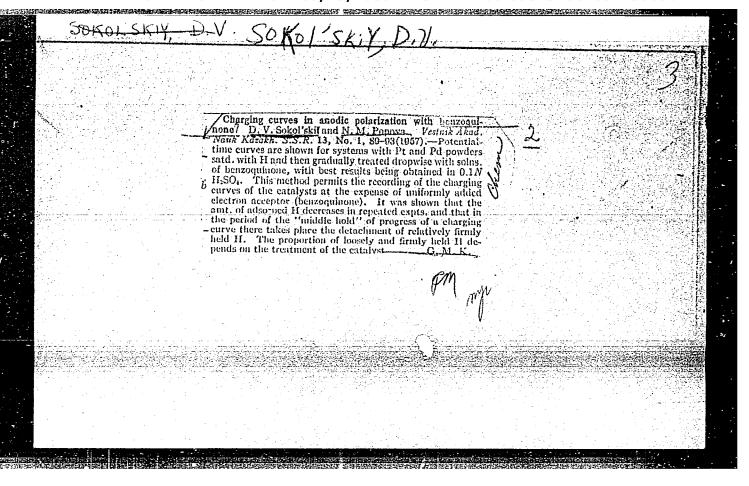
presence of the powdered Ni-catalyst decreases in the following order: methylethylvinylcarbinol and methylpropylvinylcarbinal, 2-methyl-1-vinylcyclohexanol-1, 1-vinylcyclohexanol-1. The activation energy is 5 to 6 kcal

per mole.

Card 1/1

VOLOSHIN, I.I.; SOKOL'SKIY, D.V.

Effect of purification of cottonseed oil on its hydrogenation rate. Izv.AN Kazakh.S.S.R. Ser.khim. no.1:67-75 '57. (MLRA 10:5) (Cottonseed oil) (Hydrogenation)

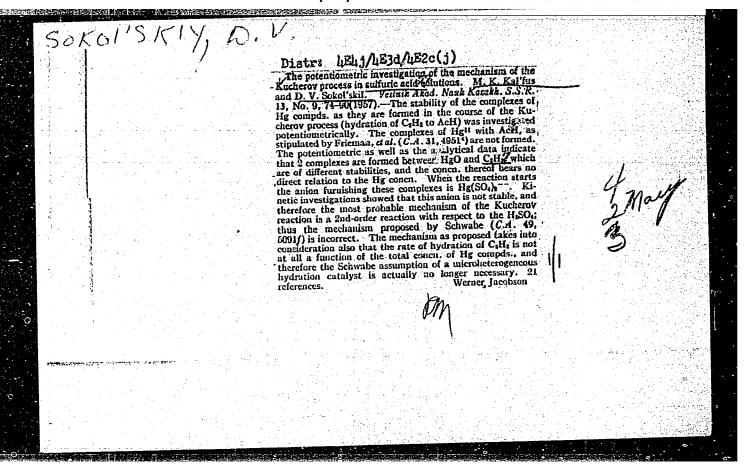


SOKOL'SKIY, D.V.; ZAVOROKHIN, N.D.

Mechanism of the action of acetylene and its derivatives during acidic corrosion of steel. Vest. AN Kazakh. SSR 13 no.8r59-75
Ag '57.

(Acetylene) (Steel)

(Corrosion and anticorrosives)



SOKOL'SKIY, D.V.; MELEKHINA, L.S.; PERUNOVA, L.I.

Effect of the nature of the solvent on the kinetics of hydrogenation of cottonseed oil. Zhur.prikl.khim. 30 no.12:1799-1806 D .'57.

(MIRA 11:1)

(Solvents) (Hydrogenation) (Cottonseed oil)

PA - 2896

AUTHOR:

SOKOL'SKIY, D.B. Member of the Academy of Science of the Kazakh S.S.R.

DZHARMALIYEVA, K.K.

TITLE:

The Dependence on the Medium of the Amount of Hydrogen adsorbed on

Nickel-Skeleton and Platinum Catalyzers.

(Zavisimost'kolichestva adsorbirovannogo na nikel-skeletnom i pla-

tinovom katalizatorakh vodoroda ot sredy. Russian).

PERIODICAL:

Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 4, pp 860 - 862

(U.S.S.R.)

Received: 6 / 1957

Reviewed: 7 /1957

ABSTRACT:

One of the unavoidable stages of catalytic hydration is a previous activation of the reaction components on the surface of the catalyzer. The activation of hydrogen and of an unsaturated compound on this surface depends on the specific properties of the compounds to be hydrated, on the nature of the catalyzer, and on reaction conditions. A change of medium (milieu) exercises considerable influence on the strength of the hydrogen binding to the surface. By the application of various solvents it is possible to regulate the amount of hydrogen adsorbed on the surface. The present paper investigates the influence exercised by different alkali- and acid concentrations on the above mentioned adsorption in connection with the hydration of some organic compounds by the adsorbing hydrogen, as e.g. orthonitrophenol. Experiments with a nickel-skeleton catalyzer were carried out in a NaOH solution (0,01 - 15,0 n), those

Card 1/3

PA - 2896

The Dependence on the Medium of the Amount of Hydrogen adsorbed on Nickel-Skeleton and Platinum Catalyzers.

with platinum in NaOH and H2SO4. As from table 1, the amount of water extracted from the catalyzer within 2 hours is reduced with the increase of the alkali concentration. The maximum quantity was 70 - 80 ml. As 1 g of the nickel catalyzer contains 110 - 120 ml adsorbed hydrogen, not the entire adsorbed amount of hydrogen is extracted, but only the atoms which are weakly connected with the catalyzer surface. With rising temperature the extracted amount of H increases. Orthonitrophenol was selected as a substance able to extract the total adsorbed quantity of H from the catalyzer. From table 2 it may be seen that the extracted H quantity increases with increasing alkali concentration. Illustration 1 shows the kinetic and potential curves of the orthonitrophenol hydration in the case of different concentrations of alkali and at 60°. As may be seen, the potential of the catalyzer is reduced abruptly after the introduction of O- nitrophenol in the course of the first minute, during which time also more than the half of the total quantity of hydrogen is extracted. This quantity increases with rising temperature, probably at the expense of the lower catalyzer layers. Unlike nickel, the adsorbed H quantity in the case of platinum catalyzers is nearly independent of the alkali

Card 2/3

PA - 2896

The Dependence on the Medium of the Amount of Hydrogen adsorbed on Nickel-Skeleton and Platinum Catalyzers.

concentration. Table 5 shows that in the case of all akali- and acid concentrations, about the same quantity of hydrogen is extracted from platinum. (2 illustrations, 3 tables).

ASSOCIATION:

Kazakhish State University "S.M.Kirov" at Alma-Ata.

PRESENTED BY:

SUBMITTED:

5.11.1956

AVAILABLE:

Library of Congress

Card 3/3

CIA-RDP86-00513R001652130006-7 "APPROVED FOR RELEASE: 08/25/2000

Schon SKIY, D. V.

20-3-37/59

AUTHORS

Sokol'skiy, D.V., Member of the Academy of Sciences of the Kazakh SSR, and Bezverkhova, S., T.

TITLE

The catalytic activity of skeleton nickel as dependent on the conditions of hydrogen activation. (Zavisimost' kataliticheskoy aktivnosti skeletnogo nikelya ot usloviy aktivatsii vodoroda).

PERIODICAL

Doklady Akademii Nauk, 1957, Vol. 115, Nr 3, pp. 554 - 556 (USSR.).

ABSTRACT

The catalytic properties of skeleton nickel result from the presence of adsorbed Hydrogen. A change in its amount leads to a change in the activity of the contact. The subject of this paper is to study the influence of a preceding dehydration of the catalysator on the hydras tion velocity of dimethylethymylcarbinol in various media (NaOH, water, ethanol) at 20, 40 and 60°C. The experimental results from the aforesaid hydration are given in table 1 and fig. 1. From these, it can be seen, that, according to the medium and the temperature, a preceding partial or total removal of the adsorbed hydrogen from the surface of the catalysator has a varying influence on the catalytic activity of nickel. In the case of hydration in alkaline media at low temperatures the velocity was most highly impaired because of the dehydration. Skeleton nickel is in water less sensitive to the removal of hydrogen. No influence at all can be remarked in alcohol. These results can be explained by different activation velocities of hydrogen at the dehydrated catalyzer, which are dependent on the medium

card 1/2

20-3-37/59

The catalytic activity of skeleton nickel as dependent on the conditions of hydrogen activation.

and the temperature. In alkaline media the regeneration of hydrogen takes place very slowly and under difficult conditions, because the hydrogen is closely connected to the surface. Thereby the reaction velocity is reduced by 63 /, disregarding the total absorption of the lost hydrogen at the saturation of the catalysator from the gaseous phase. If the medium is represented by water, the activation of the hydrogen takes place much faster and easier. From this results the negligible influence of the dehydration on the velocity. In alcomolic media, where the amount of hydrogen bound to the surface of the catalysator is insignificant, the easy regeneration of the activated hydrogen ensures a stable operating condition of the skeleton nickel. Because an increase of the temperature in the experiment has a favourable influence on the activation, the dehydration at ho and 60°C does not reduce the reaction velocity to a considerable extent. (There are 2 Slavic references, 1 table and 1 figure).

ASSOCIATION

Kazakh State University im. "S.M.Kirov", Alma-Ata. (Kazakhskiy gosudarstvennyy universitet im.S.M.Kirova, Alma-Ata).

SUBMITTED

February 18, 1957.

AVAILABLE

Library of Congress.

Card 2/2

AUTHORS:

Sokol'akiy, D. V., Member of the AN of the Kazakh SSR, Malakhov,

TITLE:

The Method of Electric Conductivity in the Investigation of Powdery Metallic Catalyzers in the Liquid Phase (Metod elektroprovodnosti pri issledovanii poroshkoobraznykh metallicheskikh katalizatorov v zhidkoy faze)

PERIODICAL:

Doklady AN SSSR, 1957, Vol. 117, Nr 3, pp. 455 - 457 &USSR)

ABSTRACT:

In this case n-heptane is used as a solvent. The experiments were also carried out in benzene, 96 % alcohol, and icy carbonic acid. When determining the electric conductivity of the powders, a catalytic "duck" was placed upon the bottom of the cell. The resistance was measured by means of a direct current bridge. The high conductivity of active nickel powder is caused by the hydrogen it contains. In freshly prepared skeleton-nickel the resistance may vary from one to several thousand Ohms. However, powder kept for several days under alcohol is unable to conduct any current. However, if the powder is saturated with hydrogen, its resistance decreases as long as the powder absorbs hydrogen. A certain low value of resistance then results, which is here described as "saturation resistance". The resistance of the skeleton nickel is directly pro-

Card 1/2

20-3-27/52

The Method of Electric Conductivity in the Investigation of Powdery Metallic Catalyzers in the Liquid Phase

portional to the distance between the electrodes and decreases with an increased weighing-in of powder. Analogous precipitation curves apply in the case of each weighed-in quantity, and to each curve there belongs a "saturation resistance". Also the influence exercised by oxygen, acetylene, methyl ethyl, acethylenyl carbinol on the resistance of 0,75 g of a skeleton nickel-powder saturated with hydrogen at 20 was investigated. In all cases the removal of hydrogen from the surface of the catalyzer brought about by these substances led to an increase of its resistance. Also after shaking up the powder in air resistances of millions of Ohms are attained. The temperature dependence of the electric conductivity of skeleton nickel and platinum blackening is the dependence which is characteristic of semiconductors. There are 3 figures, and 4 Slavic references.

ANTHRI TERRITORIE PIETE PROPULARIZATION DE LA DELLA DELLA PROPULARIZADA DE LA PROPULACIÓN DE LA PROPULACIÓN DE

SUBMITTED:

July 1, 1957

AVAILABLE:

Library of Congress

Card 2/2

AUTHORS: Sokoliskiy, D. V., Member of the Academy of Sciences of the Kazakh SSR, and Fasman, A. B.

TITLE: The Dependence of the Velocity of Hydrogenation on the Amount of Skeles ton Nickel Catalyzer (Zavisimosts skorosti gidrirovaniya ot kolichests va skeletnogo nikelevogo katalizatora).

PERIODICAL: Doklady AN SSSR. 1957, Vol. 117, Nr 5, pp. 845-847 (USSR).

The purpose of the present paper is to study this problem under model conditions, by means of the potentiometer method. In this way, it is ABSTRACT: possible to obtain some information on the processes taking place at the surface of the catalyzer. The hydro-carbons Hexine-l and transpiperilene were used as experimental substances. The methods employed in this examination were described in a preliminary paper (reference 7). The Hexine-L was hydrated in absolute ethanole and in H-heptane. The length of the linear domain of the curve, which represents the dependence of the hydration velocity on the amount of nickel increases with an increasing intensity of the mixing. The order of the kinetic curves resembles the zero order in the case of this series of experiments. Rules deviating a little from these were observed in the case of H-heptane. If the amount of catalyzer is small, the velocity of hydration is proportional to a factor greater than the first power Card 1/3

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652130006-7"

The Dependence of the Velocity of Hydrogenation on the Amount 20-117-5-55/54 of Skeleten Nickel Catalyzer.

of the amount of nickel. The specific activity of the catalyger passes through a maximum, which shifts towards greater amounts of weighed-out nickel at an increasing intensity of mixing. The velocity of hydration is smaller with small amounts of nickel in H-heptane than it is in alcohol, with great amounts of nickel the reverse holds. In the case of a hydration of trans-piperilene in an alcoholic medium only 70 $^{\rm o}/_{\rm o}$ of the amount of hydrogen theoretically necessary are absorbed, which is very probably connected with the simultaneous occurrence of secondary processes. The order of the kinetic curves approaches the first order. In the subsequent series of experiments the hydration of hexine-1 in alcohol was investigated at an unchanged ratio between the non-boundary compounds and the catalyzer. The specific catalytic activity increases with an increasing amount of catalyzer at a weak mixing, and passes through a maximum at strong mixing. With an increasing intensity of mixing the concentration of the non-boundary compound on the surface of the catalyzer decreases. The hexine-L almost immediately deprives the catalyzer of a certain proportion of its hydrogen content. Furthermore, a parallel process takes place successively, consisting of a simultaneous hydration of the alkine, alkene and of a saturation of the catalyzer with hydrogen from the gas phase. The measurement of the poten=

Card 2/3

The Dependence of the Velocity of Hydrogenation on the Amount of Skeleton Nickel Catalyser.

tial of the catalyser may be employed with success for the determination of the optimum ratio between the amounts of catalyser and of the reacting substance. There are 2 figures, 1 table, and 14 references, 8 of which are Slavic.

SUBMITTED: June 27, 1957.

Card 3/3

NI, P.F.; SOKOL'SKIY, D.V.

Rhenium as a promoter of the catalyst nickel on silica gel in the hydrogenation of unsaturated compounds in the liquid phase. Izv.

AN Kazakh. SSR. Ser.khim. no.1:46-54 '58. (M) (Catalysts, Nickel) (Rhenium) (Hydrogenation)

SOKOL'SKIY, D.V.; DUNINA, L.P.

Hydrogenation of sodium propiolate on skeletal nickel catalyst.

Izv. AN Kazakh. SSR. Ser.khim. no.1:55-64 '58. (MIRA 12:2)

(Propiolic acid) (Hydrogenation) (Catalysts, Nickel)

SOKOL'SKIY, D.V.; ZHAKIPOVA, A.Zh.

Selectivity of hydrogenation; hydrogentaion of phenylpropiolic acid and dimethylacetylenylcarbinol. Izv. AN Kazakh. SSR. Ser.khim.

no.1:65-70 '58.
(Propiolic acid) (Hydrogenation) (Propynol)

(MIRA 12:2)

YERZHANOV, A.I.; SOKOL'SKIY, D.V.

Potentiometric study of the hydrogenation of benzalacetone. Izv.
AN Kazakh. SSR. Ser.khim. no.1:71-78 '58. (MIRA 12:2)
(Acetone) (Hydrogenation) (Potentiometric analysis)

80307

sov/81-59-7-22593

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 7, p 72 (USSR)

AUTHOR:

Sokol'skiy, D.V.

TITLE:

On the Mechanism of the Reaction of Catalytic Hydrogenation

PERIODICAL:

Tr. In-ta khim. nauk AS KazSSR, 1958, Vol 2, pp 3 - 52

ABSTRACT:

The mechanism of the reactions of hydrogenation of various compounds in the liquid phase in the presence of catalysts of the VIII-th group of the Periodic System was considered. It was noted that it is necessary, studying the kinetics of the reaction, to make allowance for the quantity of hydrogen sorbed by the catalyst. The dependence of the reaction rate and the potential shift of the catalyst on the solvent is, in the opinion of the author, mainly caused by a change in the bond energy of the catalyst with hydrogen. The reaction rate must be determined by hydrogenation of the substance at the expense of H2 from the gaseous phase, extraction of H2 from the catalyst and subsequent saturation of the catalyst. The selectivity of the process depends on the solvent and must increase with an increase in the ratio of the

Card 1/2

SOV/137-59-1-1952

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 258 (USSR)

Zavorokhin, N. D., Sokol'skiy, D. V. AUTHORS:

Effect of Inhibitors on the Polarization of Steel in Sulfuric Acid TITLE:

(Vliyaniye ingibitorov na polyarizatsiyu stali v sernoy kislote)

PERIODICAL: Tr. In-ta khim. nauk. AN KazSSR, 1958, Vol 2, pp 53-60

ABSTRACT: An investigation was performed by the polarization-curve method of

the effect of acetylene, propiolic acid, thiourea, quinoline, and Fe3+ ions on the rate of electrode processes in H2SO4. At low D (close to the stationary potential) the inhibitors named impede both cathodic and anodic processes equally. With medium D the cathodic process is inhibited to a greater extent by acetylene, propiolic acid, and quinoline, while the anodic process is impeded greatly by thiourea. The inhibitors investigated show no effect on the process of reduction of Fe^{3+} ions to Fe^{2+} in an extended range of D. Comparison of the results obtained by the polarization and the volumetric methods indicates that the problem of the process of inhibition of the dissolution of metal in the presence of various additives cannot be solved

simply on the basis of the displacement of stationary potential and Card 1/2

	SOV/137-59-1-1952
Effect of Inhibitors on the Polarization of Steel in Sulfuri	ic Acid
the shape of the branches of polarization curves.	L. A.
	L. A.
Card 2/2	
Card 2/2	

SOV/137-59-1-1899

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 251 (USSR)

Zavorokhin, $N \in D_{\geq 0}$, Sokol'skiy, $D \in V$ AUTHORS:

Effect of Triple-bond Compounds on the Electrolytic Diffusion of TITLE:

Hydrogen in Steel (Vliyaniye soyedineniy, soderzhashchikh troynuyu

svyaz', na elektrodiffuziyu vodoroda v stal')

PERIODICAL: Tr. In-ta khim. nauk AN KazSSR, 1958, Nr 2, pp 61-69

ABSTRACT: An investigation was made of the effect of acetylene (I), propiolic

acid (II) [the Russian original reads 'propylic acid; Trans. Ed. Note], thiourea (III) and quinoline (IV) on the diffusion of H which evolves during the cathode polarization of a steel membrane in 1N H2SO4. It was established that I, II, and IV retard the H diffusion, whereas III speeds it up. Addition of III produces an immediate relationship between the electrode potential and the rate of diffusion, whereas in other cases such a relationship is absent. It is indicated that in addition to the rate of discharge the energy of metal-H bond is an impor-

tant factor in creating overpotential of H under nonequilibrium

conditions.

D.B. Card 1/1

POPOVA, N.M.; SOKOL'SKIY, D.V.

Hydrogenation of benzoquinone by sorbed hydrogen on skeletal Ni, Pt and Pd/GaCO3. Trudy Inst.khim.nauk AN Kazakh. SSR 2:70-76 ' 58.

(Hydrogenation) (Benzoquinone) (Catalysis)

POPOVA, N.M.; SOKOL'SKIY, D.V.

Hydrogenation of benzoquinone on skeletal Ni, Pt, and Pd/CaCO3.

Trudy Inst.khim.nauk All Kazakh. SSR 2:84-93 '58. (MIRA 12:2)

(Benzoquinone) (Hydrogenation) (Catalysis)

DZHARDAMALIYEVA, K.K.; SOKOL'SKIY, D.V.

Effect of the medium on the activity of a catalyst and the quantity of hydrogen adsorbed on it. Trudy Inst.khim.nauk. AN Kazakh. SSR. 2:94-111 '58. (MIRA 12:2)

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(Catalysts, Nickel) (Hydrogenation)

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KARSYBEKOV, M.A.; SOKOL'SKIY, D.V.

Hydrogenation of acetylene in the liquid phase. Report No.2:
Hydrogenation of acetylene on palladium catalyst. Trudy Inst.
Hydrogenation of acetylene on palladium (MIRA 12:2)
khim.nauk AN Kazakh. SSR 2:134-142 '58.

(Acetylene) (Hydrogenation) (Palladium)

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Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 7, p 73 (USSR)

AUTHORS: Zhanalinova, A.N., Sokol'skiy, D.V.

TITLE: The Hydrogenation of Dimethylacetylenylcarbinol in Mixed Solvents

PERIODICAL: Tr. In-ta khim. nauk. AS KazSSR, 1958, Nr 2, pp 143 - 149

ABSTRACT: The hydrogenation rate of dimethylacetylenylcarbinol (I) at 13 - 50°C in the presence of a skeleton Ni-catalyst in binary

mixtures of dioxane with water, alcohol or heptane, in the case of a change of the dioxane concentration, passes through a minimum pertaining to a dioxane concentration of 20 - 60%; the solubility of I in the same mixtures passes through a minimum in the case of compositions pertaining to the minimum reaction rate. The authors think that a decrease of the reaction rate and the solubility of I is caused by the mutual solvation of

the components of the solvent leading to an increase in the adsorbability of I and to a decrease of the energy of the bond

between the catalyst and hydrogen.

Card 1/1 S. Kiperman

SHCHEGLOV, N.I.; SOKOL'SKIY, D.V.

Hydrogenation of actylene to ethylene. Trudy Inst.khim. nauk AN

Kazakh. SSR 2:150-157 '58.

(MIRA 12:2)

(Hydrogenation)

(Acetylene)

(Ethylene)